

## CLAIMS

What is claimed is:

1. An insulative textile flooring pad comprising:  
reinforcement fibers; and  
binding fibers selected from the group consisting of polyethylene, polyester, polypropylene, and mixtures thereof, said pad having a density of greater than about 13 pounds per cubic foot.
2. The insulative textile flooring pad according to Claim 1 wherein the binding fibers and reinforcement fibers are distributed substantially randomly in a first plane.
3. The insulative textile flooring pad according to Claim 1 comprising less than about 20% binder fiber.
4. The insulative textile flooring pad according to Claim 1 comprising about 15% binder fiber.
5. The insulative textile flooring pad according to Claim 1 comprising less than about 0.2 pounds per square foot binder fiber.

6. The insulative textile flooring pad according to Claim 4 comprising about 0.1875 pounds per square foot binder fiber.

7. The insulative textile flooring pad according to Claim 1 comprising less than about 1.2 pounds per square foot reinforcement fiber.

8. The insulative textile flooring pad according to Claim 1 having a density of about 18.9 pounds per cubic foot.

9. A floor structure comprising:  
a sub floor;  
a surface layer; and  
an insulative pad disposed between said sub floor and surface layer comprising binder and reinforcement fibers distributed substantially random in a first plane, said binder fibers being meltable at a predetermined temperature to couple the binding fibers to the reinforcement fibers.

10. The floor structure according to Claim 9 wherein said surface material comprises wood.

11. The floor structure according to Claim 9 wherein said surface material comprises ceramic.

12. The floor structure according to Claim 9 wherein the binder fibers are selected from the group consisting of polyethylene, polyester, polypropylene, and mixtures thereof.

13. The floor structure according to Claim 9 having a density of greater than about 13.3 pounds per cubic foot.

14. The floor structure according to Claim 9 having a density of about 18.9 pounds per cubic foot.

15. The floor structure according to Claim 14 being about 3/32 inch thick.

16. The floor structure according to Claim 9 having a compression resistance at a compression of 25% of the original thickness of greater than about 20 psi.

17. The floor structure according to Claim 9 having a compression resistance at 50% of the original thickness of greater than about 180 psi.

18. A floor underlayment for disposal under a floor surface comprising:  
less than about 20% thermoplastic binder fibers and more than  
about 80% reinforcement fibers;

said floor underlayment having a first surface disposed beneath  
said floor surface and having a density of greater than about 13.3 pounds per  
cubic foot.

19. The floor underlayment according to Claim 18 having a density of  
greater than about 18 pounds per cubic foot.

20. The floor underlayment according to Claim 18 wherein the  
thermoplastic binder fiber is selected from the group consisting of polyethylene,  
polyester, polypropylene, and mixtures thereof.